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Report of the Secretary-General

Summary

The present report is submitted pursuant to General Assembly resolution 64/218 on human resources development. It provides an overview of the impact of the global financial and economic crisis on human resources development and lessons learned from national experiences to prevent and overcome negative effects of the crisis. It also addresses emerging national challenges and opportunities in human resources development. Selected examples of innovative strategies for sustaining and developing human resources at the national level are provided. The report highlights the role of the international community, including the United Nations system and national Governments, and others, such as the private sector, in promoting human resources development, and includes recommendations for future steps. The report concludes with recommendations building on successful national interventions.

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I. Introduction

1. The General Assembly, in its resolution 64/218, reviewed the experience of countries in implementing human resources development strategies, examining progress and challenges to date and prospects for the future. The Assembly requested the Secretary-General to submit a report reviewing lessons learned from the global financial and economic crisis on the requirements for human resources development to help countries prevent and overcome the negative effects of crises and to progress towards a more sustainable path of development.

2. In the same resolution, the General Assembly acknowledged the importance of human resources development for achieving the internationally agreed development goals, including the Millennium Development Goals, and for expanding opportunities for all people, particularly the most vulnerable groups and individuals in society. It also recognized the need for more comprehensive, coherent and cross-sectoral approaches and mechanisms for human resources development premised on national development objectives.

3. While considerable effort has been made, many countries, particularly developing countries, continue to face challenges in developing sufficient human resources capable of meeting national development needs. In addition, because of a lack of resources and capacity, developing countries often face difficulties in the formulation and implementation of effective human resources development strategies.

4. The recent global financial and economic crisis further weakened countries' capacity to address challenges in the area of human resources development at the very moment that increased investment in human resources was required to overcome the negative effects of the crisis. This difficulty has been compounded more recently by slow and uneven recovery, the growth in unemployment and high and volatile energy and food prices.

5. The present report provides an overview of the main characteristics of the global financial and economic crisis and their interrelationship with human resources development. The implications of globalization, as well as high and volatile food and energy prices, for national human resources development efforts are analysed, and practical strategies for sustainable human resources development in a wide range of areas are identified. The report was prepared in consultation with the following organizations, although not all of their contributions have been fully incorporated owing to space and other considerations: the regional commissions, particularly the Economic Commission for Europe (ECE), the Economic and Social Commission for Asia and the Pacific (ESCAP) and the Economic and Social Commission for Western Asia, the Food and Agriculture Organization of the United Nations (FAO), the International Atomic Energy Agency, the International Fund for Agricultural Development, the International Labour Organization (ILO), the International Maritime Organization (IMO), the International Telecommunication Union (ITU), the United Nations Development Programme (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund, the World Health Organization (WHO), the World Intellectual Property Organization (WIPO) and the World Bank. The report concludes with specific recommendations for future action.

II. Implications of the global financial and economic crisis for national human resources development

A. Major characteristics of the financial and economic crisis

6. Although its most acute phase appears to have passed, the effects of the global financial and economic crisis continue to be felt by countries in all regions. Moreover, after almost two years of fragile and uneven recovery, global economic recovery has started to decelerate and is expected to continue slowing down in the latter half of 2011 and in 2012, raising concerns of further downside risks.[1]

7. High unemployment levels in advanced economies, especially for youth, continue to pose risks for world stability. Developing countries, especially in emerging economies, continue to recover, even though the pace varies across countries.

8. Furthermore, the countercyclical measures taken by many Governments in the early stage of the global crisis have been abandoned in favour of fiscal austerity. Faced with widening fiscal deficits and rising public debt, many Governments have been phasing out stimulus measures, ostensibly for fiscal consolidation. This is jeopardizing Government-led recovery in many countries, increasing the risk of longer-term unemployment and further decelerating global recovery. Many Governments are cutting needed social expenditures, particularly in the areas of education and health, thus adversely affecting long-term human resources development.

9. The growth of average monthly wages has slowed, from 2.8 per cent in 2007 to 1.5 per cent in 2008 and 1.6 per cent in 2009.[2] Wage growth has moderated and there was growing inequality, even prior to the crisis. Real wage declines have adversely affected the purchasing power and well-being of workers and their families, especially those in low-paid jobs. This trend, however, varies across regions. Asia has seen little adverse impact of the global crisis on real wage growth in 2008 (7.8 per cent) and 2009 (8.0 per cent). Latin America and the Caribbean observed continued growth in real wages in 2010/11 as a result of higher labour demand, increasing employment, the temporary shortage of skilled workers and increased labour productivity.

10. Low-income developing countries and small middle-income countries, on the other hand, are expected to continue to experience negative effects of the global crisis. This is mainly because the flows of official development assistance (ODA), while still positive in 2010, are most likely to slow down in the near future owing to slow economic recovery in advanced economies. In addition, the external debt of developing countries and countries with economies in transition has increased. Furthermore, many developing countries now face volatile primary commodity prices, particularly for oil and food, which soared during the first half of 2011.

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[1] *World Economic Situation and Prospects 2011* (United Nations publication, Sales No. E.11.II.C.2).

[2] International Labour Organization, *Global Wage Report 2010/11: Wage Policies in Times of Crisis* (Geneva, 2010).

11. Many countries are also facing the emerging challenge of a "job-poor" recovery, with unemployment and underemployment remaining high. According to ILO, the number of unemployed was 205 million in 2010, 27.6 million higher than the pre-crisis level. The global unemployment rate stood at 6.2 per cent in 2010, up from 5.6 per cent in 2007.[3] Nearly 30 million jobs were lost worldwide between 2007 and the end of 2009, and at least 22 million new jobs need to be created to return to the pre-crisis level of global employment.

12. Employment recovery generally lags behind economic recovery. Employment recovery is estimated to have taken three years following the 1997/98 Asian financial crisis, and the evidence shows that the recovery time to pre-recession employment levels has become successively longer. Since the recent global crisis caused a faster and steeper rise in unemployment, it is expected to take even longer for employment to recover. Furthermore, the job losses during the crisis risk becoming permanent, with unemployed workers needing to acquire different skills in new and growing sectors to secure jobs.

13. Although job growth had rebounded and unemployment rates had fallen to pre-crisis levels by the end of 2010, quick employment recovery is not guaranteed in developing countries for at least two reasons. First, most of the 47 million new workers worldwide entering labour markets each year are searching for jobs in developing countries. Second, economic recovery has to be driven by the productive sectors in order to sustain economic growth. However, many job losses have occurred in the dynamic export sectors, suggesting the need for widespread structural change.[4]

14. In addition, there remain acute concerns about job quality and worker vulnerability. In response to rising unemployment levels, many countries have enhanced labour market flexibility. However, in the absence of strong labour institutions, labour market deregulation has often lowered wages and employment conditions. This focus on labour market flexibility also risks impairing long-term growth potential, with workers stuck in a low pay/low productivity trap. A high turnover of workers, owing to greater labour market flexibility, discourages workers from acquiring training that would enhance labour productivity.

B. Impact of global crises on national human resources development

15. The global financial and economic crisis continues to have significant negative implications for human resources development in almost all countries. In advanced economies, the impact has been mainly through two channels: the increase in unemployment and a decrease in budgetary resources devoted to government education and training programmes.

16. Many developing countries, particularly middle-income countries, appear to have weathered the global financial crisis well. However, pre-existing socio-economic challenges are expected to adversely affect long-term human resources development in view of, inter alia, the job-poor economic recovery, high youth unemployment and volatile food and energy prices.

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[3] ILO, *Global Employment Trends 2011: The Challenge of a Jobs Recovery* (Geneva, 2011).

[4] *Report on the World Social Situation 2011: The Global Social Crisis* (United Nations publication, Sales No. E.10.IV.12).

Reduced fiscal investment in human resources development

17. The fiscal positions of the advanced economies have deteriorated substantially as a result of the crisis. The sovereign debt of advanced economies is likely to increase drastically over the next few years, owing mainly to reduced revenues and large unfunded liabilities. To manage debt, many governments in developed countries are facing increasing pressures to reduce social expenditure in the medium term. In some countries, austerity-induced funding cuts have already taken effect, adversely affecting numerous social programmes supporting human resources development.

18. For example, Latvia has made significant cuts in health and reduced public funding in education by half from the 2008 level. Ireland has raised prescription, hospital and nursing home payments, made numerous cuts in education and reduced support for job training programmes. Denmark has proposed to significantly reduce student grants. In the United States of America, most school districts have implemented cuts in education programmes, reducing the number of teachers and their salaries. The United Kingdom of Great Britain and Northern Ireland has proposed nearly doubling university fees after a 14 per cent cut in university budgets in 2010. Greece and Italy have implemented pay freezes on public sector workers, including those in education and health care. France has announced the elimination of 100,000 public sector jobs, many in education and health care, by replacing only half of those retiring and reducing public sector pay.

19. While the majority of developing countries have managed to sustain social sector budgets, tightening fiscal policies have resulted in spending freezes or cuts in education, health and other human resources development expenditures in some countries.[5] The shrinking pool of financial resources for education is forcing some countries to delay or defer funds for education (e.g. early childhood education and literacy programmes) or withhold increases in education expenditure despite increasing enrolment, as well as cut spending for higher education.

20. The decline in ODA flows may also adversely affect human resources development in developing countries. There are clear indications that health budgets have tightened in African countries as a result of reduced funding by donors, among other reasons.[6] This will have serious consequences, as many African countries rely on external funding for a substantial proportion of their health expenditure. In 2008, 23 countries received between 20.3 and 63.5 per cent of their total health funding from external sources. Also, the share of external assistance to basic education has been static since 2002, and decreased by 6 per cent between 2007 and 2008 in sub-Saharan Africa.[7]

21. In addition to having long-term consequences on human resources development, the depletion of resources also has a short-term effect on training and skills development. Most labour markets are already burdened by a surplus of unemployed and underemployed youth, due in part to mismatches between skills in

[5] UNESCO, "The impact of the crisis on public expenditure on education: findings from the UNESCO quick survey", Impact of the Global Financial and Economic Crisis on the Education Sector, No. 1 (Paris, 2009).

[6] WHO, *World Health Report 2006: Working Together for Health* (Geneva, 2006).

[7] UNESCO, *Education for All Global Monitoring Report 2011: The Hidden Crisis: Armed Conflict and Education* (Paris, 2011).

demand and skills acquired. As such, it has become necessary to "retool", retrain and to upgrade the skills of the unemployed and underemployed. In addition to strengthening employment policies and labour market institutions, upgrading skills through improved educational outcomes, vocational and on-the-job training and the acquisition of new technologies has become increasingly critical.

High and volatile food and energy prices

22. Recent high food and energy prices have put pressure on human resources development in many developing countries. Low-income food-deficit countries have been hit the hardest. While high food prices can potentially benefit producers, they harm net food buyers (those who do not produce enough to cover their food needs). Higher prices in international markets have not triggered positive supply responses by farmers in developing countries.

23. At the community and household levels, high food and energy prices often lead to changes in consumption patterns. Growing difficulties in access to food may lead to risky coping strategies, including distress asset sales, the withdrawal of children from school, cutbacks of health-care expenses and worsening of diets and food intake. Nutritional deficiencies and chronic hunger are the most immediate consequences affecting people's mental and physical abilities to work, which in turn lead to losses in productivity and income. The high cost of energy exacerbates the living conditions of poor households, especially those with already limited access to electricity, increasing their reliance on biomass for cooking. Higher oil prices increase farmers' production costs and the processing and distribution of agricultural commodities, thus further increasing food prices.

Reducing employability

24. The global crisis has diminished the long-term employability of many entry-level workers. Young people are currently nearly three times more likely to be unemployed and are more likely to be in vulnerable jobs in most regions.[8] In both developed and developing countries, youth unemployment and underemployment rates have reached alarming levels. At the end of 2010, there were an estimated 77.7 million unemployed young people,[9] marginally down from 79.6 million in 2009, but still far more than the 73.5 million total in 2007. The rate of global youth unemployment stood at 12.6 per cent in 2010.[3]

25. Even before the crisis, existing human resources were not fully utilized as a result of below-potential economic growth, poorly functioning labour market institutions and/or the mismatch between the skills of workforces and labour market demand. However, a new surge in the unemployed, especially among young people, will have long-term implications for national human resources development, not only because their inputs are not efficiently utilized, but also because their future productivity will be constrained.

26. In addition, gender inequality is exacerbated by the global crisis, increasing risks, particularly for young women. When crises and other factors weaken young women's capacity and undermine their social and economic advancement, it

[8] Economic Commission for Latin America and the Caribbean/ILO, The Employment Situation in Latin America and the Caribbean, Bulletin No. 5, June 2011.

[9] Defined as those 15-24 years of age.

exacerbates chronic poverty, including by increasing the likelihood of transmitting poverty to the next generation.

27. The economic capacity of those who are unable to get jobs declines over time, as they are more likely to be ill-equipped when the economy recovers. Higher unemployment also reduces the sources of income normally spent on food, health care and education, and thus reduces the overall capacity and well-being of the workforce. This has an especially negative impact on young people, as they are at the age when skills formation is normally high. Some youth, however, may pursue additional education because of the lack of available jobs. For example, several Latin American countries observed a fall in the labour supply among young people because they remained in the educational system longer after the crisis hit.

28. Skills training can also help to delay entry into the labour market. Such training should, however, be designed to lead to employment and income-generating opportunities, through combination with on-the-job training, job search assistance, career guidance and counselling. Technical vocational education and training systems not only create an entry-level pathway from school to a skilled job, but also retool workers to improve their employability. Recognizing their potential to meet the needs of both youth and employers, an increasing number of countries are focusing on such systems as an important policy agenda.[10] Some Governments, in collaboration with the business community, legislatures and academia, have developed "retooling strategies" for youth that aim to identify likely skill gaps and shortages in the near future.

III. Challenges and opportunities in national human resources development

29. Globalization has created opportunities and challenges for human resources development. Information and communications technologies and other innovative technologies have lowered functional, hierarchical and geographical barriers and drastically changed how labour markets operate. Private and public institutions are now able to reach out to the most talented workers in a cost-effective manner, which has created opportunities for talented individuals and countries with skilled workforces. On the other hand, this may also lead to brain drains for developing countries, while unskilled workers in developed countries may face greater job insecurity as migrant workers enter labour markets or jobs are outsourced to other countries.

30. Continuous investment in human resources development for sustaining skilled workforces attuned to the demands of increasingly competitive global markets is therefore critical. A competent human resources base enhances productivity and economic growth in all sectors. However, simply enhancing the skills, knowledge and abilities of individuals may not be sufficient, as national economic competitiveness is measured not only by the aggregate skills of a country's workforce, but also by the flexibility and capacity of the workforce to adjust to changing needs with speed and efficiency.

[10] ILO, Increasing the Employability of Disadvantaged Youth: Responding to the Impact of the Financial and Economic Crisis, Guidance Note (Geneva, 2010).

31. Different types of skills are required at different levels of development. For example, increasingly interactive, adaptable, analytical and cognitive skills are necessary to achieve higher levels of labour productivity. As workers shift from one type of skill to another in a fluid labour market, there is a need to build "soft skills", involving adaptability and flexibility, beyond occupational skills. Even for the public sector, new types of skills and capacity are required in such areas as effective communication, knowledge assimilation and management, strategic planning and the ability to coordinate a wide range of stakeholders in public, private and civil society institutions. A shift towards a green economy also requires reconciling the need for creating green jobs with adjustments needed in other economic sectors.

32. There is a growing recognition that many educational and training systems are not adequately preparing human resources for changing needs, thus creating a mismatch between demand and supply. Although recognizing the problem, many developing countries have not yet been able to integrate emerging skill needs into the school curricula, formal education or training programmes.

A. Human resources development and underutilized subgroups

33. Demographic trends, including the "youth bulge" of new job seekers in Africa and the Middle East and the shrinking labour forces in Europe and in Central and East Asia owing to low fertility rates and ageing populations, pose another set of challenges beyond creating new jobs.

34. Integrating disadvantaged groups, such as women, youth, minorities, persons with disabilities, or indigenous peoples, into the labour market remains a challenge. The low utilization of human resources means lost opportunities in terms of productive output, social security, income tax contribution and savings through lower welfare payments. Improving the educational achievement and labour market performance of marginalized groups will not only enhance overall national human resources capacity, but also positively contribute to the national economy.

35. Maximizing the use of labour resources requires policies that reduce gender-based barriers to education, training and employment. Across regions, women tend to have lower economic activity rates than men. They are concentrated in fewer, often low-paid occupations in the informal sector. Women work fewer hours in paid employment (owing to the higher prevalence of part-time work) and have more career interruptions due to family responsibilities. This gender segregation in the labour market reflects stereotypes in education and the gender roles prevailing in society.[11] The efficient use of the female labour force can be promoted by increasing women's participation in a wide range of occupations in formal employment.

36. In general, the agriculture sector suffers from low human resources capacity, gender inequality and a lack of investment in new technologies and infrastructure. In many developing countries, where women play a key role in agriculture,[12]

[11] In the ECE region, women represent the large majority (three quarters) of tertiary students in health- and welfare-related subjects, but are a minority (one quarter) in engineering, manufacturing and construction.

[12] FAO, *The State of Food and Agriculture 2010-11: Women in Agriculture: Closing the Gender Gap for Development* (Rome, 2011).

improving women's productivity will result in increased food availability and agricultural productivity. According to recent estimates of FAO, if women had the same access to productive resources as men, they could increase yields on their farms by 20-30 per cent. This could raise total agricultural output in developing countries by 2.5-4.0 per cent, which would in turn reduce the number of hungry people in the world by 12-17 per cent.

37. Child labour, common in many regions, deprives children and adolescents of the chance to acquire skills and education, often permanently compromising their prospects. Decreased education leads to low-skilled workforces with exposure to low wages and vulnerable jobs. The prevention and elimination of child labour, allowing all children to benefit from education and training, would increase the likelihood of their obtaining gainful jobs and better incomes as youth and adults.

B. Migration and human resources development

38. With rising unemployment, many host countries have tightened immigration controls and introduced tougher requirements for migrant workers. Also, migrant workers tend to lose their jobs more quickly than other workers as a consequence of national policies or public pressures, during periods of economic slowdown when immigrants are often targeted for ostensibly making the situation more difficult. Migration has a significant impact on human resources development through a number of transmission mechanisms. The remittances of migrant workers increase household incomes and improve education and health outcomes in the countries of origin. Information, knowledge and skills brought back by migrant workers help innovation and entrepreneurship in their home countries. At the same time, the migration of skilled workers can lead to shortages of skills in the countries of origin, while high unemployment rates create outmigration pressure for skilled workers. The complexity of issues related to migration and their implications for human resources development need to be further examined from multiple points of view.

39. In 2010, an estimated 214 million workers migrated to other countries, of whom 49 per cent were female, up from 195 million in 2005; despite a slowdown because of the economic crisis, the number continues to increase.[13] Six out of every ten international migrants (128 million) reside in developed countries today, while the majority of international migrants (74 million) originated in developing countries (see A/65/203).

40. In countries where the majority live in poor socio-economic conditions, globalization acts as a "pull" factor, with the promise of better jobs and higher pay. At the same time, low wages, combined with unsatisfactory and often hazardous working conditions, act as "push" factors for outmigration. As a result, some developing countries face the problem of brain drain, losing their highly skilled human resources developed over many years.

41. The outmigration of skilled workers, owing to high unemployment or an inadequate job supply, can be regarded as a brain drain. In many countries with high outmigration, unemployment is a chronic problem. Promoting migration as a strategy for solving unemployment, however, could lead to a loss of skilled labour

[13] Department of Economic and Social Affairs, Population Division, Trends in international migrant stock: the 2008 revision (United Nations database, POP/DB/MIG/Rev.2008).

needed locally, especially when opportunities to migrate abroad are concentrated in certain professions. For example, migration in the Pacific region is more skewed towards the skilled, partly because of the policies of the main destination countries, which favour skilled workers in certain professions. High migration rates can eventually lead to high outflows of skilled workers, especially in health and education.

42. According to the *World Health Report 2006*, a substantial number of health workers leave their home countries each year, either temporarily or permanently.[6] The World Health Assembly, acknowledging the complex issues surrounding the mobility of health workers, adopted the Global Code of Practice on the International Recruitment of Health Personnel in May 2010.[14]

43. Other migrant workers acquire knowledge and skills in the countries to which they migrate. These skills can ultimately improve the quality of the workforce in their home countries. As a result, several countries have reacted with domestic job creation programmes combined with incentives to assist returning migrants to reintegrate into communities. However, low-skilled workers usually engage in low-skill activities in destination countries, which provide little chance for acquiring or upgrading skills. Strategic human resources development planning for outgoing and returning low-skill migrant workers will help to maximize the development benefits gained by migrant workers.

C. Remittances

44. Remittance flows to low- and middle-income countries amounted to $316 billion in 2009, down from $336 billion in 2008 (see A/65/203). The decline in overall flows was due to a steep decline in remittances from the top remitting countries in Europe, the United States and the Russian Federation. Many countries in Eastern Europe and Central Asia, which rely heavily on remittances, experienced as much as a 21 per cent fall in remittances. North Africa has also been severely affected by high unemployment in oil-rich countries. However, remittances overall remained resilient against the economic downturn and have rebounded significantly, although not back to pre-crisis levels.

45. Remittances are increasingly playing a key role in enhancing human resources development in countries of origin, as a substantial amount of this income is used to finance education and health expenditures. Reviews of household surveys show that once basic consumption needs are met, remittances are increasingly spent for investing in businesses as well as for education. Evidence from Pakistan, the Philippines and the Pacific island countries shows that remittance-receiving households can afford to keep their children in school longer and can afford private education, usually perceived as being of higher quality.

[14] WHO, *Sixty-third World Health Assembly, Geneva, 17-21 May 2010, Resolutions and Decisions*, Annexes (WHA63/2010/REC/1).

IV. Practical strategies for sustainable human resources development: lessons learned from national experiences

46. In response to the effects of the global financial and economic crisis, many countries have implemented various temporary, medium- and long-term measures to retain, support and retool their human resources. Longer-term human resources needs in such areas as information and communications technology, green economy, intellectual property, the design of effective social protection programmes, the reduction of urban/rural gaps in education and health services and productive agriculture and rural development have also been addressed.

Measures taken to respond to the global financial and economic crisis

47. In a job-poor recovery, some advanced countries have opted to reduce workforces or freeze employment, while others have chosen to negotiate with labour unions to reduce working hours and/or wages to contain job losses. Other countries have implemented active labour market policies to integrate the unemployed into the workforce or to encourage employers to retain human resources during the crisis. Examples of such measures include job-retention subsidies and recruitment incentives, subsidies for job-sharing programmes, reductions in non-wage labour costs for hiring the unemployed, job search assistance and matching, business start-up incentives, work experience programmes, training programmes and investment in information technology for managing human resources information and processes.

48. Measures have also been taken to make human resources development more cost-effective by improving teacher training, curricula and vocational training. Adoption of good practices could save considerable resources.

49. The European Union created a European Globalization Adjustment Fund in 2007 providing €500 million annually to help unemployed workers obtain new skills or start up their own businesses. The programme was amended in 2008 to help workers affected by the financial crisis. In addition, a "New skills for new jobs" initiative was launched in 2008 to upgrade skill levels, improve forecasts of future job needs and increase dialogue between the business community and education providers.

Investing in human resources through social protection programmes

50. Even before the global crisis, a growing number of countries had devised comprehensive strategies to enhance the human resources development and income of poor households. Often combined with poverty reduction and social inclusion strategies, such comprehensive social protection programmes have proven effective in both mitigating immediate economic shocks and contributing to human resources development.

51. Successful social protection programmes, including conditional and non-conditional cash transfers, social pensions and employment guarantee schemes, are well documented (see E/CN.5/2011/2). Typical conditional cash transfer programmes target poor families with children, and consist of small cash grants and transfers in kind conditional on children's school attendance and regular health check-ups. By offsetting the costs of education and health care, such programmes are designed to increase school attendance and retention and prevent disease and malnutrition, thus contributing to a better-educated and healthier workforce. They

also safeguard families from various risks caused by unemployment, sickness, disability, old age and natural disasters.

52. The Bolsa Familia programme of Brazil, the largest conditional cash transfer programme, provides monthly subsidies to more than 12 million poor families, conditional on school attendance and antenatal and post-natal care. The Oportunidades programme of Mexico substitutes isolated income transfers, such as in kind services (a package of health, nutritional and educational benefits) and price discounts, with targeted income transfers under certain conditions. The programme covers 5 million families, or 25 per cent of the population, with a budget of $3.3 billion in 2007. Other programmes, such as Argentina's Plan Jefes y Jefas de Hogar Desocupados, conditional on school attendance and immunization, also offer training for participants to develop new vocational skills.

53. A variety of social protection initiatives are emerging in Asia. China's minimum living standards guarantee schemes provides regular cash and/or in kind support to poor households, covering 66 million, or nearly 5 per cent, of the population in 2008. The Benazir Income Support programme in Pakistan aims to increase the purchasing power of economically vulnerable families. The Pantawid Pamilyang Pilipino programme of the Philippines is a comprehensive national poverty reduction and social development strategy, enabling poor families to invest in human resources by offsetting the costs of both health care and education.[15]

54. In sub-Saharan Africa, social protection programmes target mainly the most vulnerable and often integrate cash transfers with service provisions. The Productive Safety Net programme of Ethiopia was shifting away from emergency food aid distribution, providing transfers to 8 million food-insecure households by the end of 2008. The programme provides transfers in cash and/or food in return for work and direct support to households with no labour or other means of support. In Kenya, a cash transfer programme for orphans and vulnerable children, covering 100,000 households and 230,000 orphans and vulnerable children, combines transfers to households in extreme poverty with conditionality on health care and school attendance.

55. Various innovative initiatives are being implemented to improve employability and generate short- and long-term employment opportunities for vulnerable communities. Activities include small-scale labour-intensive public works, targeted schemes to support the employment of individuals belonging to marginalized groups and wage subsidy schemes for encouraging small- and medium-sized enterprises to hire job-seeking youth. Social protection programmes encourage labour market participation in low- and middle-income countries through guaranteed public work opportunities.[16]

56. The National Rural Employment Guarantee Scheme of India, the largest of its kind in the world, is based on a statutory right to 100 days of work annually at the minimum wage. In 2007-2008, it provided jobs for almost 34 million rural households at a cost of 0.3 per cent of gross domestic product. More than half the beneficiaries were agricultural and unskilled workers. The scheme enables families

[15] ESCAP, *The Promise of Protection: Social Protection and Development in Asia and the Pacific* (Bangkok, 2011).

[16] UNICEF, Social Protection: Accelerating the MDGs with Equity, Social and Economic Policy Working Brief (New York, 2010).

to acquire assets, such as livestock, and to increase spending on food and non-food items. The Expanded Public Works programme of South Africa (the second phase of which was launched in 2009) generates short- and medium-term employment by providing additional work opportunities (between 100 days and 24 months), combined with training in literacy, numeracy and vocational and business skills.

57. Interventions to develop a healthy workforce may take years before results are observed; however, returns from such investments can be significant. Over the past 20 years, Brazil has trained and recruited more than 25,000 family health teams in remote and rural areas, covering approximately 60 per cent of the population. Ethiopia has trained 32,000 health extension workers since 2005 for deployment in remote health posts. Thailand introduced an integrated approach, called "local training and hometown placement", which recruits students with a rural background to be trained as nurses and doctors in nearby communities. These efforts have reduced urban/rural gaps and improved health outcomes.

Human resources development in emerging areas

58. "Green growth" has been adopted as one of the regional strategies for achieving sustainable development in Asia and the Pacific. A series of regional green growth policy dialogues, training-of-trainers sessions, seminars and national workshops have been conducted for government officials, policymakers and practitioners to strengthen their capacity to develop and implement green growth policies, strategies and road maps.

59. For example, Cambodia has established a national green growth secretariat, and its interministerial green growth working group has developed a national green growth road map. Kazakhstan has conducted a national study on the application of green growth policy tools in strategic management and planning. The Astana Green Bridge Initiative for the Europe-Asia-Pacific Partnership for Green Growth was endorsed at the sixth Ministerial Conference on Environment and Development in Asia and the Pacific in 2010. A pro-poor green business initiative based on the provision of renewable (biogas) energy, clean water and sanitation facilities has been developed in Samoa and replicated by other communities in Fiji, Vanuatu and other Pacific small island developing States.

60. The need for information and communications technology (ICT) system capacity has increased, as ICT has become vital for socio-economic development in almost all countries. The use of ICT services has continued to grow despite the recent economic downturn. At the end of 2009, there were an estimated 4.6 billion mobile cellular subscribers globally. More than half of the total population in developing countries had access to mobile cellular services, and approximately 26 per cent of the world's population had access to the Internet (64 per cent in developed countries and 18 per cent in developing countries or 14 per cent excluding China).[17] According to the World Bank, in Africa, access to telephone services, particularly mobile phones, escalated from 2 million users in 1998 to more than 400 million in 2010. The remarkable growth in Africa in the past decade, which attracted over $56 billion in private sector investment between 1998 and 2008, is due largely to the influx of mobile technologies.

[17] ITU, *Measuring the Information Society* (Geneva, 2010).

61. However, increasing Internet access requires addressing the challenge of providing universal access to broadband networks. Broadband is now seen as an essential element of national infrastructure, like transport, water and energy networks. The availability and use of broadband infrastructure enables Governments to transform service delivery and promote business, innovation and competitiveness. However, fully exploiting the potential benefits of a broadband economy requires the development of a broad range of new expertise and skills at different levels across societies, including formulating and implementing ICT policies.[18]

62. To promote the adoption of broadband-friendly practices and policies, the Broadband Commission was established by ITU and UNESCO so that all people could take advantage of its benefits. The role of broadband for human resources development and education is a key topic for the Commission, and a working group on the issue has been established.

63. Some countries have invested significant ICT resources in education. In Singapore, the third master plan for ICT in education (2009-2014) aims to strengthen competencies for deeper learning and to encourage knowledge creation through ICT use. Jordan, recognized as a regional technology hub, has been building its ICT infrastructure and promoting ICT as a tool to improve human resources and foster economic development. Since 2003, the Government has put strong emphasis on the application of ICT and invested significant budgetary resources through its national education strategies to improve Internet penetration to 50 per cent to increase ICT revenues and employment.

64. Rapidly changing technologies and the complexity of Internet protocol systems pose challenges for national institutions. Access to protected intellectual property is increasingly necessary for the private sector, Governments and research institutions. As a result, the need to enhance skills for intellectual property policy evaluation and management has become acute, particularly in developing countries.

V. Role of the international community in formulating and implementing national human resources development strategies

A. Role of the international community

65. ODA flows are expected to decline with continued fiscal austerity in developed countries owing to greater sovereign debt following the global financial and economic crisis. The international community can sustain a level of engagement and support developing countries in strengthening their human resources through more targeted and cost-effective approaches. Renewed focus should also be placed on the least developed countries and countries with small economies where human resources development needs are the greatest.

66. United Nations organizations have supported human resources development in emerging areas, such as the green economy, ICT, intellectual property, international maritime rules and standards and the peaceful application of nuclear science and

[18] ITU, The Role of ICT in Advancing Growth in Least Developed Countries: Trends, Challenges and Opportunities 2011 (Geneva, 2011).

technology. In addition, more comprehensive and integrated approaches have emerged in social protection programmes, creating agricultural and rural employment and addressing urban/rural gaps in health and education.

67. UNESCO has monitored the impact of the crisis on the education sector in its member States through an initial exploratory survey examining education budgets in 50 developing countries,[5] a more detailed examination of economic growth, revenues and education budgets in 12 countries,[19] and other studies to assess the magnitude and nature of the impact of the crisis on day-to-day school activities.

68. FAO has recently adopted a corporate strategy on capacity development, clearly shifting from its traditional approach of providing training for individuals to enhancing national capacity for managing long-term change in agriculture and rural development. In 2010, WHO issued global policy recommendations to address the rural/urban maldistribution of health workers. WHO is working with partners to support national efforts in implementing those guidelines.

69. The World Bank has been assisting developing countries in investing in the ICT infrastructure necessary for creating jobs and expanding production, services and trade. The Regional Communications Infrastructure programme in East Africa is one such initiative. ITU extended a series of capacity-building activities to develop skilled Internet and "new broadband economy" professionals through its academic and learning events.

70. The United Nations Public Administration Network[20] offers various free online training tools and learning resources on innovative practices in governance and public administration. Its country studies[21] facilitate mutual learning among Governments and international, regional and national institutions for capacity development in the public sector.

71. WIPO provides comprehensive capacity-development opportunities for developing countries, including through its worldwide Academy, e-learning, training on PATENTSCOPE research and patent information, technology and innovation support centres and WIPO Lex,[22] a database that provides free access to intellectual property legislation.

72. To respond to the shortage of qualified and experienced human resources in developing countries, the Integrated Technical Cooperation Programme of IMO aims to enhance human and institutional capacities in implementing IMO rules and standards. The International Atomic Energy Agency supported capacity-building in the peaceful use and application of nuclear energy. It provides training, at the interregional, regional and national levels, on nuclear law, energy system analysis and planning, nuclear safety and security and the application of nuclear science and technology in key areas such as food and agriculture, health, water resources management and monitoring and protection of marine and terrestrial environments.

73. Examples of capacity-building initiatives supported by ESCAP include the "Academy of ICT Essentials for Government Leaders" training programme, online green growth training-of-trainers programmes, the green growth portal of the

[19] See UNESCO, document 184 EX/10.

[20] See www.unpan.org.

[21] See www.unpan.org/unpacs.

[22] See www.wipo.int/wipolex/en/.

regional network of policymakers, the Asia-Pacific Research and Training Network on Trade and the United Nations Network of Experts for Paperless Trade.

B. Role of the private sector

74. The private sector has a critical role in driving economic growth in developing countries. Public-private partnerships have emerged as a major option for developing and maintaining large-scale public infrastructure, including broadband, or in making basic service delivery more efficient. While careful design is needed, public-private partnerships could offer viable options for further enhancing human resources development, particularly when austerity measures are being undertaken by major donor countries.

75. The UNDP Public-Private Partnerships for Service Delivery programme[23] seeks to increase access by the poor to basic services such as water, waste removal, energy, education and health by promoting inclusive partnerships among local governments, businesses and communities. Other successful public-private partnerships in the health sector include the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria.

76. In addition, inclusion of the private sector in the formulation of human resources development strategies can be beneficial in identifying future growth sectors and the new skills required. Collaboration with the private sector can be also sought in skills development, on-the-job training and the recruitment and retention of young workers.

C. Role of national Governments and development partners

77. National Governments have primary responsibility for human resources development. Their vision and political will make a great difference. The recent financial and economic crisis has posed challenges to Governments, but has also brought opportunities. The existence of a comprehensive and coherent strategy enables Governments to strategically prepare their human resources, ensuring that they are attuned to future labour market needs and ready to take advantage of opportunities brought about by new technologies and innovation. Furthermore, sustainable long-term investment by Governments in human resources development is indispensable.

78. In addition to comprehensive human resources development strategies, sectoral polices and strategies need to incorporate human resources dimensions. Donor countries may revisit their development aid policies and consider allocating ODA to strengthen human resources development in developing countries, particularly the least developed countries. A review of ODA to examine the extent to which human resources development is supported through sectoral flows of ODA may also be helpful.

[23] See www.undp.org/pppsd.

VI. Conclusions and recommendations

Conclusions

79. Human resources development lies at the heart of economic, social and environmental development. A skilled, educated, healthy, capable, productive and flexible workforce, equipped with knowledge of newly emerging areas, is the foundation for countries to achieve sustainable economic growth and social progress. As such, every country, regardless of economic status, needs to align human resources development with national development strategies.

80. Many developing countries continue to face challenges in developing human resources sufficient to meet national economic and social needs. In addition, because of a lack of resources and capacity, developing countries often lag behind in formulating and implementing effective human resources development strategies.

81. Underutilized human resources need to be fully integrated into labour markets. Effective use of ICT is also key to successful human resources development. As high and volatile food and energy costs continue to threaten food and energy security, particularly in rural areas, capacity to meet food and energy needs must be strengthened. Finally, comprehensive social protection programmes are integral to successful human resources development strategies.

Recommendations

82. The following recommendations should be considered:

National level

(a) Governments should place human resources development at the core of economic and social development and intervene effectively to enhance such development and to quickly and greatly reduce the share of the population in low-productivity jobs;

(b) Upgrading human skills is necessary, as most jobs to be created are likely to be in new and innovative sectors, including in the "green economy";

(c) Countries with advanced economies should maintain or enhance measures to boost job-rich recovery, such as policies and incentives to enhance labour productivity and stimulate private investment, besides efforts to reduce budget deficits in the long term;

(d) Governments should strengthen social protection systems to enhance human resources development;

(e) Governments should better align education and training systems and labour market needs. School curricula and skills training programmes must be updated regularly in close consultation with employers;

(f) Governments should strengthen labour institutions and regulations to respond in a timely manner to economic downturns by preserving jobs and protecting workers in vulnerable jobs;

(g) Strategies to strengthen human resources development should incorporate efforts to invest in emerging sectors, particularly ICT and environmental enhancement;

(h) Measures should be devised to reduce unemployment and underemployment among young men and women, who have been disproportionately affected by the job-poor recovery, including by providing incentives for recruiting, retaining and retooling, assistance in searching for jobs and matching jobs to skills, technical, vocational and on-the-job training and promoting youth entrepreneurship;

(i) Efforts should be made to reduce barriers to employment, particularly gender barriers;

(j) Innovative measures should be taken to maximize the benefits of migration while minimizing the negative effects. More integrated analysis should be carried out on migration patterns and the impact of migration from macroeconomic and labour market perspectives with a view to national human resources development;

(k) Interlinkages among human resources development, energy, food security, agriculture and rural development should be better understood and addressed;

International level

(l) To align with national strategies, bilateral and multilateral donors should support developing countries in enhancing national human resources development. North-South, South-South and triangular cooperation should contribute to human resources development in developing countries;

(m) Relevant United Nations entities and civil society actors, including the private sector, should shift their approach from training individuals to building institutional capacity to address long-term national human resources development needs;

(n) Donors should consider dedicating more ODA to human resources development and study how sectoral aid could better support such development;

(o) The feasibility of expanding public-private partnerships in developing countries should be examined, particularly for job creation and youth employment;

(p) Efforts should be undertaken to lower remittance costs to maximize the benefits of migration for human resources development;

(q) Governments, donors and United Nations organizations should support the Social Protection Floor initiative.[24]

[24] See www.icsw.org/doc/SPF/SPFI_Brochure_Jun10_Eng.pdf.